



August 1st, 2023

Annual Report of the International Association for Biological Oceanography (IABO)

Activities summary for 2022 - 2023

During this performance cycle, IABO activities focused on these key areas: 1) organization of the 6th World Conference on Marine Biodiversity (VI WCMB) held in Penang, Malaysia, on July 2-5 of 2023; 2) reviewing of SCOR Working Group proposals; 3) full implementation of the *PeerJ-IABO Hub*; 4) selection of the 2022 Carlo Heip awardee; and 5) IABO President elections for the 2024-2026 cycle. Details about each of these activities are provided below.

1. VI World Conference on Marine Biodiversity in Penang, Malaysia

The VI WCMB conference was organized in collaboration with the Centre for Marine & Coastal Studies (CEMACS) of Universiti Sains Malaysian (USM) and held in Penang, Malaysia, on July 2-5 of 2023. Details about this event are available on the conference website: www.wcmb2023.org.

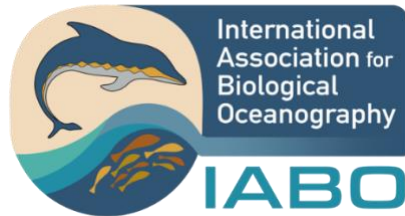
IABO held its General Assembly on July 5th and led the closing ceremony of the conference. During the GA meeting, there was ample opportunity to: (i) provide an overview of the Association's accomplishments during this performance cycle, (ii) highlight activities related to SCOR, (iii) present the Carlo Heip Awards to Pablo Penchaszadeh (2021) and Angelika Brandt (2022), (iv) present the PeerJ IABO Hub to the conference audience, (v) introduce Prof. Judith Gobin as the newly elected IABO President (details below), and (vi) announce the upcoming VI WCMB conference in Bruges, Belgium, in 2026.



Prof. Tan Shau Hwai (USM)



VI WCMB opening ceremony



VI WCMB Press conference



Invited dignitaries of the VI WCMB

IABO coordinated travel support sponsored by SCOR for international students and early career researchers (ECR) to attend the VI WCMB conference. Full travel grants (USD 370 fees + 230 Travel Support= 600) were awarded to the following applicants:

1. Mannage Lenin Indirajith De Silva - *Sri Lanka*. Abstract title: Taxonomy of Harmotrema sp. Infecting Intestine of Hydrophis schistosus, Hydrophis curtus, Hydrophis cyanocinctus and Hydrophis spiralis marine snakes of Sri Lanka
2. Samson Job Philemon – *Tanzania*. Abstract title: Ocean acidification impacts on commercially important sea cucumbers of the Indo-Pacific region are understudied.
3. Phurich Boonsanit – *Thailand*. Abstract title: The Ecophysiological Response of the Key Mangrove Crab Episesarma mederi (H. Milne Edwards, 1853) to Salinity Challenges: Implications for Conservation Physiology and Climate Change Biology
4. Diana Leticia Salcedo Oropeza - *Mexico* (Instituto de Biología, Universidad Nacional Autónoma de México). Preliminary Analysis of the Capabilities of Microscopic Fungi of Hydrothermal Vents to Degrade Crude Oil.
5. Miftakhul Sefti Raufanda – *Indonesia*. Abstract title: Barnacles Analysis as a Microplastic Pollution Bioindicator on the East Coastal of Surabaya
6. Ranjana Yadav – *India*. Abstract title: Population Dynamics of Cerithiid Gastropods (Pirenella cingulata) on Mudflat and their Trematode Parasites
7. Li Zhen Zhen - *China* (Swire Institute of Marine Science, School of Biological Sciences, University of Hong Kong). Abstract title: Modulations of thermal plasticity in marine phytoplankton under changing climate.

Partial travel support of \$400 USD were also awarded to:

1. Chan Yi Wynn – *Malaysia*. Abstract title: Heavy metal concentrations in sea turtles from Massachusetts and the Mid-Atlantic Bight region, USA
2. Xin Dang – *HK, China*. Abstract title: Transgenerational inheritance of ocean acidification-induced feminization in edible oyster



2. Review of SCOR Working Group Proposals

IABO's Executive Committee and the Science Task Group completed the evaluation of the following Working Group proposals submitted to SCOR in 2022:

- Towards best practices for Measuring and Archiving Stable Isotopes in Seawater ([MASIS](#))
- Developing resources for the study of Methylated Sulfur compound cycling PROCesses in the ocean ([DMS-PRO](#))
- Foraminifera in Extreme and Rapidly Changing Environments ([FIERCE](#))
- Reducing Uncertainty in Soluble aerosol Trace Element Deposition ([RUSTED](#))
- DEveloping Repositories for carbon FLUX quantification: Th-234 as a case study ([DEPOFLUX](#))
- DYNamic Approaches for assessing Marine biota responses to fluctuating Oceans ([DYNAMO](#))
- Impact of biotoxins on marine apex predators in Upwelling Systems ([ToxMAP](#))

IABO continued to serve as liaison of the following active Working Groups:

1. CoNCENSUS: Advancing standardisation of COastal and Nearshore demersal fish visual CENSUS techniques – [WG164](#)
2. Respiration in the Mesopelagic Ocean (ReMO): Reconciling ecological, biogeochemical and model estimates – [WG161](#)
3. Roadmap for a Standardised Global Approach to Deep-Sea Biology for the Decade of Ocean Science for Sustainable Development (DeepSeaDecade) – [WG159](#)
4. Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases (MetaZooGene) – [WG157](#)

3. Launch of the *PeerJ-IABO Hub*

The Association launched the IABO Hub (<https://peerj.com/hubs/iabo>) on December 21st of 2022 in partnership with *PeerJ Publishing Group* to facilitate publication of peer-reviewed articles from the IABO community on PeerJ's open-access journals with APC discounts and full fee waivers for selected countries. The launch of the IABO Hub has resulted in the growth of the Association's membership, promoting IABO announcements (e.g. Carlo Heip Excellence Award notifications, WCMB conferences, community workshops), and the collection of funding in the form of tokens that can be used toward publishing fees of submissions from registered IABO



members from developing and least developed nations. The Editorial Board of the Hub is composed by members of the IABO Executive Committee and Task Groups to ensure that manuscripts submitted to this platform are reviewed by the IABO community. More information about the *PeerJ*-IABO partnership can be found on the [web](#).

The International Association for Biological Oceanography

HOME SUBMIT EVENTS ABOUT ADMIN EDITORIAL

Welcome to the IABO Hub, the publishing home of the International Association for Biological Oceanography.

The Hub features the latest biological oceanography research published by the members of IABO. Anyone can browse the Hub and make a pre-submission enquiry, but you can unlock more features - and benefits - when you join the Hub Community.

It's free to join the Hub, and IABO. You'll benefit from a Hub publishing discount, increased visibility of your research in your community, and you can access, and donate to, the Hub Cooperative Publishing Fund.

Submissions are assessed for community relevance by the Hub Editorial Team, made up of IABO members. Articles are peer reviewed and published in *PeerJ Life & Environment*, a high quality, Open Access journal publishing world-class research from across the globe.

Hub Editorial Team

	Ana Carolina Peralta Professor, Universidad Simón Bolívar		Mark Costello Professor, Nord University
	Cesar Cordeiro Associate Professor, Universidade Estadual do Norte Fluminense		Valentina Costa Researcher, Stazione Zoologica Anton Dohrn, Napoli

SUBMIT ABSTRACT
Open to non-members as well

Members [VIEW ALL \(185\)](#)

- John Carroll**
Georgia Southern University
- Daniel Lauretta**
Research and teaching faculty (lecturer, professor)
Museo Argentino de Ciencias Naturales "Bernardino Rivadavia"
- Hana'ah Fazhan**
Research and teaching faculty (lecturer, professor)
Universiti Malaysia Terengganu
- Isaure de Buron**
Research and teaching faculty (lecturer, professor)
College of Charleston
- Cesar Cordeiro**
Associate Professor
Universidade Estadual do Norte Fluminense

IABO continues to grow its membership through completion of the [Google Form](#) in the IABO website to verify members information. Once registered, IABO members can receive notifications about travel grants, fellowships, job opportunities, international collaborations, and publishing benefits of the *PeerJ-IABO Hub*.

As of August 1, 2023, the IABO Hub has accumulated:

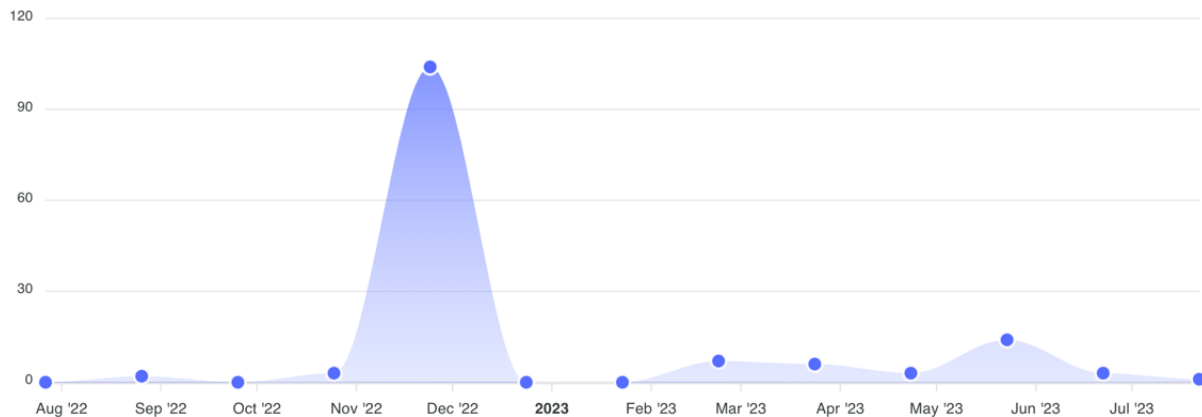
- 342 *new* members
- 112 abstract submissions, and
- 37 published papers.

The IABO Hub fund currently has **\$2,500 USD** in the form of PeerJ tokens that can be used for covering Article Processing Charge (APC) costs.



ABSTRACT SUBMISSIONS OVER TIME

Daily Weekly 30 Days 



PeerJ Life & Environment and the IABO Hub sponsored four Early Career Researcher awards at WCMB 2023, two (2) for oral presentations and two (2) for posters. Each award winner received a free publication in PeerJ Life & Environment (subject to peer review) and a feature about their research posted on the PeerJ blog.

Eligible participants had to be:

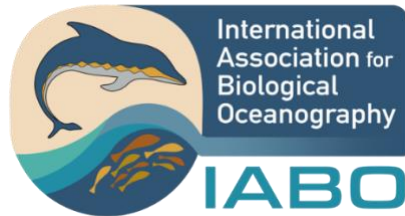
- Aged 35 and below;
- Postgraduate candidate;
- Completed PhD not more than five (5) years

Information about PeerJ Award winners from WCMB 2020 [here](#).

4. Selection of the 2022 Carlo Heip awardee

By December 21st of 2022 IABO received four (4) nominations to the Carlo Heip Award. The [Recognition Task Group](#) was responsible for coordinating the selection process. The selected candidate for the 2022 Carlo Heip Award was Prof. Angelika Brandt. The award ceremony was carried out at the VI WCMB in Penang, Malaysia, during IABO's General Assembly.

Prof. Dr. Angelika Brandt is the head of the Marine Zoology department at Senckenberg Research Institute and Natural History Museum in Frankfurt and currently work in the board of directors at Senckenberg. Angelika Brandt's main research focus is systematics, biodiversity, biogeography, evolution and ecology of deep-sea macrofauna, especially, Crustacea: Malacostraca along the NW Pacific and Polar Regions. Her work documented high biodiversity of Southern Ocean deep-sea invertebrates. In recent years, her research interest concentrated in the identification of drivers of evolution in the deep sea, such as dispersal barriers, as well as,



advancing deep-sea sampling methodologies. She is active in deep-sea research (currently in the Northwest Pacific and Southern Ocean), but also interested in biodiversity of the World Oceans. Senckenberg also has a strong traditional marine focus on the Red and Arabian seas, as well as the North Sea and Baltic Sea.

Angelika Brandt has coordinated and led several oceanographic expeditions to Antarctica, notably the series of ANDEEP (ANtartic benthic DEEP-sea biodiversity) cruises, which have contributed significantly to our understanding of Antarctica and deep-sea fauna and biology. She also has a long-lasting collaboration with Russian colleagues and the series of their deep-sea cruises to the NW Pacific and Arctic Seas led to the discovery of more than 100 new deep-sea species to science and their digitization efforts for that area increased the open deep-sea data to more than seven times than before. Her efforts and enthusiasm have had a major benefit to the deep-sea community and definitely increased our knowledge of the least explored ecosystem of the world, the deep sea.

Angelika has had a lot of awards and honors during her career, such as, Annette-Barthelt Foundation science prize in 1992, the National Geographic Society award for Adventurer of the Year in 2007, SCAR Medal for excellence in Polar Sciences In 2008. Her Nature publication in 2007 (co-authored by several ANDEEP collaborators) was designated as 4th of the 10 most important scientific discoveries in 2007 by Time magazine. Angelika raised millions of euros through third-party funding from many different organizations, for example, the German Research Foundation (Deutsche Forschungsgemeinschaft) and The Federal Ministry of Education and Research, abbreviated BMBF.

Angelika has a long list of public services and accomplishments. Some examples are 1- expert team leader of “Clean Ocean” team for UN decade for ocean science and sustainability kick-off meeting in Berlin 29.5.-2.6.2021, Speaker for research field “systematics and taxonomy” at Senckenberg, Steering Committee of SOOS (Southern Ocean Observing System) (2011 -2015), Vice President - German Society for Polar Research (DGP) (2010 -2015), and Advisory board of ESF ERICOM-RV Aurora Borealis Science (ESAP) Member (2009 - 2012). In the framework of the Census of the Marine Life, she was involved in the Antarctic and deep-sea field projects CAML (Census of the Diversity of Antarctic Marine Life) and CeDAMar (Census of the Diversity of Abyssal Marine Life).

5. IABO President elections for the 2023-2026 cycle

The IABO President and Secretary General positions were up for renewal in 2023 and the new leadership was appointed during our General Assembly at the VI WCMB conference in Penang, Malaysia, on July 5th. IABO requested input from its registered members to elect the new representatives for the 2023-2026 cycle. For the first time, members of IABO had the opportunity to elect the Association's President directly.



The overall responsibilities of the President of IABO include fostering collaborations between IABO and partner organizations to advance the scope and reach of marine biology and biological oceanography sciences, act as Executive Committee Ex-Officio member of the Scientific Committee on Oceanic Research (SCOR), support programs under the UN Decade of Ocean Sciences for Sustainable Development such as Marine Life 2030 and others, and oversee all IABO activities and finances. IABO's Secretary General provides support to these tasks by maintaining correspondence with (and reporting to) SCOR, organizing meetings and IABO's General Assembly (WCMB conferences), coordinating the Carlo Heip Award, and managing the IABO Hub and the Association's finances.

IABO's EC members and colleagues from the community were invited to participate as candidates for the Presidency, and the final list of volunteering candidates was as follows:

- Suchana (Apple) Chavanich (Chulalongkorn U., Thailand)
- Judith Gobin (UWI, Trinidad and Tobago)
- Brian Helmuth (NE University, USA)
- Jonathan Lefcheck (SERC, Smithsonian I., USA)
- Cesar Cordeiro (UFF, Brazil)
- Fernando Lima (U. Porto, Portugal)

Ranked-choice voting was applied in this election. With this method the candidate with > 50% of casted votes is elected as President, and the one with the second highest number of votes is offered the Secretary General position, which serves as a stepping stone to the Presidency. A Google Form was sent to registered members (listed on the IABO Hub) via the IABO Gmail account 'iabioceanog@gmail.com' for them to cast their vote by March 3rd, 2023. This form did not collect personal information and thus ballots were anonymous.

The elected candidate for the Presidency was Prof. Judith Gobin from The University of the West Indies in Trinidad and Tobago. Prof. Gobin is the Head of the Department of Life Sciences of the Faculty of Science and Technology at The University of the West Indies, St. Augustine Campus, Trinidad and Tobago. She spearheads efforts focused on advancing deep-sea research, and capacity building and technology transfer in marine sciences of Small Island Developing States (SIDS) in the Caribbean Sea. Prof. Gobin is also actively engaged in UN negotiations of the Legally Binding Instrument (LBI) on Areas beyond National Jurisdiction (ABNJ). She will lead IABO for the 2023-2026 Presidency. We are truly delighted to have Judi stir the course of our Association during the 2023-2026 cycle.

During the IABO GA at the VI WCMB, Prof. Gobin was formally announced as Presidency of IABO. As part of the closing ceremony, Judi introduced Dr. Leen Vandepitte (VLIZ) as the lead organizer of the VII WCMB conference to be held in Bruges, Belgium, in 2026.

